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EXAMINER

MULLER, BRYAN R

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/602,406
Filing Date: June 23, 2003
Appellant(s): KOVACH, JAMES A.

**MAILED
JUN 15 2007
GROUP 3700**

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For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 2/2/2007 appealing from the Office action mailed 1/27/2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

4,237,754	Battrick	12-1980
6,698,317	Machovsky	3-2004
6,269,717	Bollinger	8-2001

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

1. Claims 10, 11 and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Battrick (4,237,754) in view of Machovsky (6,698,317), Bollinger (6,269,717) and Duke (Des. 311,315).
2. In reference to claim 10, Battrick discloses a drain spud wrench, comprising a wrench body having a longitudinal axis, a first end portion extending from said wrench body having a first plurality of projections (20) that define first and second transverse channels for receiving a cross-shaped portion of a drain spud and a second end portion extending from said wrench body in a direction opposite from said first end portion, said second end portion includes a second plurality of projections (42) that define third and fourth transverse channels for receiving a cross-shaped portion of a drain spud of second size. Battrick however fails to disclose that the first end portion comprises a first polygonal recess sized to accept a standard sized socket drive defined radially inward and axially spaced from said first and second transverse channels, a second polygonal recess that is smaller than said first polygonal recess defined axially inward of said first polygonal recess, said second recess being sized to accept a standard sized socket drive or that the second end portion comprises a third polygonal recess sized to accept a standard sized

socket drive defined axially inward of said third and fourth generally transverse channels and a fourth polygonal recess that is smaller than said third polygonal recess defined axially inward of said third polygonal recess, said fourth recess being sized to accept a standard sized socket drive. Machovsky discloses a plumbing tool with a first end having similar projections that define channels (36) and are capable of receiving a cross-shaped portion of a drain spud and a second end that has a polygonal recess (46) sized to accept a conventional socket drive (col. 2, lines 37-40) defined radially inward and axially spaced from said first and second transverse channels. Further, Duke discloses a tub strainer wrench that has projections and channels on both the first and second side to that are similar to the Battrick and Machovsky tools for receiving a cross-shaped portion of a drain spud and further discloses that both sides comprise polygonal recesses sized to accept a socket drive defined radially inward and axially spaced from said first and second transverse channels.

Providing the recesses taught by Machovsky and Duke allow the wrench to be driven by a handle or socket drive, which will inherently provide more torque than attempting to turn the wrench by hand and a socket drive may be useful where a handle or slide bar may be too large to fit. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide both ends of the Battrick spud wrench with polygonal recesses sized to accept a socket drive defined radially inward

and axially spaced from said first and second transverse channels, as taught by Duke and to size both the recesses on both ends to accept a standard sized socket drive, as taught by Machovsky (conventional size is equivalent to standard size). Finally, Bollinger discloses a multi-sized tool adapter (40) that acts as an extension and has two polygonal recesses (22 and 24) wherein the second polygonal recess is axially aligned with the first recess and axially spaced from the first recess that would allow different sized tools and ratchets to be used with the same adapter (col. 1, lines 7-8). Bollinger also discloses that the dual cavity application may be applied to different types of rotational tools (col. 4, line 63 – col. 5, line 3). Therefore, it further would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the axially aligned polygonal recesses in both ends of the Battrick spud wrench, made obvious by Machovsky and Duke, with a second polygonal recess that is smaller than said first polygonal recess defined axially inward of said first polygonal recess in view of Bollinger which would make the tool capable of receiving different sized socket drives and as a result, a more universal tool that could be used with multiple standard socket drives and eliminating the need for a specialized tool to drive the spud wrench or a slide bar that may not fit in specific uses of the tub wrench. Further, Bollinger discloses that the larger recesses may have an effective diameter of 3/8" and the smaller recess may have an effective diameter of

¼" (col. 2, lines 64-67), both of which are standard socket drive sizes, thus it further would have been obvious to size both large and small recesses to receive standard sized socket drives.

3. In reference to claim 11, the obvious combination, discussed supra, discloses a solid drain wrench body (the body of all of the Battrick, Machovsky and Duke wrenches are solid, thus the combination discloses a solid body) having a longitudinal axis, a first end portion extending from said wrench body in alignment with said longitudinal axis comprising structure configured to engage a drain spud, said first end portion defining at least two polygonal recesses configured to accept different sized socket drives and a second end portion extending from said wrench body in a direction opposite from said first end portion and comprising structure configured to engage a drain spud of a second size (Battrick clearly discloses that each side is different sized, figures 3A and 3B), said second end portion defining at least two polygonal recesses configured to accept different sized socket drives. It further would have been obvious in view of the Machovsky reference, which teaches that a socket driver may be used to drive the spud wrench and the Bollinger reference, which teaches the use of a socket drive extension with a socket driver to increase the usefulness of a tool that the drain wrench may be used with a socket driver and a socket drive extension.

4. In reference to claim 19, the obvious combination, discussed supra, further discloses that said first and second end structures configured to engage a drain spud are comprised of a plurality of projections that define a series of transverse channels.

5. In reference to claim 20, the obvious combination, discussed supra, further discloses that the polygonal recesses defined in the first and second end portions are axially inward and axially spaced from said transverse channels.

6. In reference to claim 21, the obvious combination, discussed supra, discloses a drain spud wrench comprising a solid polygonal wrench body having a longitudinal axis, a first end portion extending from said wrench body comprising a plurality of projections (20 of Battrick) that define first and second transverse channels for receiving a cross shaped portion of a drain spud, a first circular extension (26 of Battrick) of said first end portion, where the first circular extension includes four slots (28 of Battrick) aligned with gaps between said projections, said slots extend from a face of the first end portion, and are sloped radially outward and a first and second polygonal recess extending axially inward from the face of said first end portion, forming a first and second polygonal receptacles, where said first polygonal receptacle is configured to accept a standard socket driver and said second polygonal receptacle extends axially inward from the first polygonal receptacle and configured to accept a smaller

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socket driver than the first polygonal receptacle; and a second end portion extending from said wrench body comprising a plurality of projections (42 of Battrick) that define third and fourth transverse channels for receiving a cross shaped portion of a drain spud, a second circular extension (50 of Battrick) of said second portion, where the second circular extension includes four slots (52 of Battrick) aligned with gaps between said projections, said slots extend from a face of the second end portion, and are sloped radially outward and a third and fourth polygonal recess extending axially inward from the face of said second end portion, forming third and fourth polygonal receptacles, where said third polygonal receptacle is configured to accept a standard socket driver and said fourth polygonal receptacle extends axially inward from the third polygonal receptacle and configured to accept a smaller socket driver than the third polygonal receptacle.

7. In reference to claim 22, the obvious combination, discussed supra, further discloses that the first and second end portions are of different size (figures 3A and 3B of Battrick).

(10) Response to Argument

In response to the applicant's arguments:

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A. The applicant first argues that the rejections of claims 10, 11 and 19-22 as obvious over Battrick in view of Machovsky, Bollinger and Duke are believed to be improper for the following reasons:

- a. Applicant argues (starting on page 7, line 12 of the appeal brief) that the teachings of the Machovsky reference are improperly applied to the Battrick reference because Machovsky discloses a tool with only one working end for engagement with plumbing parts and one recess opposite the working end for engagement with a driving tool. In response, as discussed supra, the examiner has applied the teaching of Machovsky that it is desirable to provide a plumbing tool having a slide bar (62 of Battrick and 42 of Machovsky) driving device with an additional driving mechanism comprising a polygonal recess that may be engaged by a conventional socket driver to provide the tool with multiple driving options to make the tool more versatile. Thus, Machovsky clearly provides motivation to provide the tool of Battrick with a polygonal recess opposite the working end of the tool as an alternate driving mechanism.
- b. Applicant further argues (starting on page 7, line 18 of the appeal brief) that the teachings of the Duke reference are also improperly applied to the Battrick reference because the Duke reference does not teach that the recesses provided to both sides of the tool, which

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allow the tool to be reversed and driven on either end by a driving device to increase torque applied by the user, could be engaged with a socket drive. In response, with regard to claims 10 and 19-22, the claims do not require that the recess be engaged by a socket drive, thus Duke clearly provides motivation to provide such a recess in either end of the tool of Battick to increase the torque for the tool, wherein this structure, when further combined with the teaching of Bollinger and Machovsky will read on the claimed structure disclosed in claims 10 and 19-22. Further, with regard to claim 11, although Duke does not specifically disclose that the recesses are intended to be used with a socket drive, the teachings of Machovsky are applied to disclose that a socket drive may be used to engage the polygonal recess disclosed by Machovsky, which would also obviously be able to engage the recesses disclosed by Duke and it is further well known, as well as disclosed by Bollinger that a socket driver extension may be used with a socket drive to extend the reach and versatility of the socket drive when engaging any other tools. Thus, the combination of the teaching clearly discloses the structure of the drain wrench along with the combination of the drain wrench, a socket drive and a socket driver extension.

- c. Applicant further argues (starting on page 8, line 8 of the appeal brief) that the use of a larger recess outside of the smaller recess shown by Duke could enable undesirable transverse or non-axial movement of the handle during rotation. However, this potential adverse affect is not disclosed by any of the references, thus no reference actually teaches away from the addition of larger recesses outside the smaller recesses disclosed by Duke. Additionally, as discussed supra, Bollinger clearly provides motivation for advantageous results that may be achieved by the addition of a larger recess outside of existing smaller recesses.
- d. Applicant further argues (in the footnote on page 8 of the appeal brief) that it would be improper to modify the two-ended tool of Duke with the teachings of the one-ended tool of Machovsky. In response, as discussed supra, the examiner is not applying the Machovsky reference to modify the Duke reference. The examiner applies the teachings of both Machovsky and Duke to the Battrick reference to provide motivation to provide the tool of Battrick with a polygonal (or non round) hole along a central axis to allow a user to apply an alternate form of driving that will increase the driving torque applied to the tool. Additionally, the teachings of Machovsky are separately applied to teach that such a driving recess may be applied to a plumbing tool in addition to a slide bar and the Duke

reference is separately applied to teach that a double-ended tool may have a driving recess located on either end, that is recessed from the working face of each side of the tool to allow a driver to alternately be applied to either end to allow a user to use the same driver to drive the tool while alternatively using either working end of the tool.

- e. Applicant further argues (starting on page 8, line 14 of the appeal brief) that the teachings of the Bollinger reference are improperly applied to any of the Battick, Machovsky or Duke references because the Bollinger reference is not a spud wrench. In response, the examiner indicates that although Bollinger does not disclose a spud wrench, the teaching of Bollinger are referring to any tool that is known to have some form of driving recess, such as the recesses disclosed by Machovsky and Duke, and teaches that providing any of these known recesses with an additional larger or smaller adjacent recess will allow a user to use multiple drivers having different sizes or orientations to engage the tool for rotation. Therefore, the teaching of Bollinger clearly provides motivation to modify the driving recesses of Machovsky and Duke to provide a specific advantage to the tools.
- f. Applicant further argues (starting on page 9, line 5 of the appeal brief) that Battick would not require a driving recess because

Battrick already provides a slide bar for driving the tool. In response, as discussed supra, the Machovsky reference provides both a slide bar (42) and a driving recess for engagement with a socket drive. Thus, Machovsky clearly provides motivation to add a driving recess to the tool of Battrick to make the tool more versatile.

- g. Applicant further argues (starting on page 9, line 7 of the appeal brief) that Machovsky discloses a one-ended tool, which would only teach a socket drive on one end of the tool, opposite the working end. In response, as discussed supra, the teachings of Duke are applied to teach that a two-ended tool may have a recess to drive either end of a two-ended tool and further, the teaching of Machovsky provides a recess opposite the working portion of the tool. Thus, when applied to the two-ended tool of Battrick, it would have been obvious, in view of Machovsky, to provide a driving recess opposite both of the driving ends.
- h. Applicant further argues (starting on page 9, line 13 of the appeal brief) that even of the combination of Battrick and Bollinger were appropriate, Bollinger discloses that "any tool end" may be modified, thus arguing that Bollinger only teaches that one tool end may be modified. In response, as discussed supra, the Machovsky and Duke reference provide motivation to provide the tool of

Battrick with driving recesses on both ends. In this case, both recesses may be considered as “any recess” as taught by Bollinger. Even though the one specific section of Bollinger may be interpreted as being singular, Bollinger does not disclose anywhere that *only* one recess on any particular tool may be modified, thus it would have been obvious, in view of Bollinger to modify both recesses in the combination of Battrick, Machovsky and Duke.

- B. With reference to claim 11, (starting on page 10, line 1 of the appeal brief) the applicant argues that the wrenches disclosed by Battrick, Machovsky and Duke are not solid, as claimed in line 5 of claim 11. In response, even though each of the wrenches may be hollow or have a through hole, all of the wrenches disclosed by Battrick, Machovsky and Duke are structured as one integral part, thus making each of the wrenches solid. There are several definitions of the term “solid”, wherein several definitions such as “having three dimensions”, “firm, hard, or compact in substance”, “without separation or division; continuous” and “forming the whole; consisting entirely of one substance or material”¹, all of which read on the wrenches disclosed by Battrick, Machovsky and Duke. However, other definitions including “having the interior completely filled up, free from cavities, or not hollow” and

¹ All definitions are from:

Dictionary.com Unabridged (v 1.1)

Based on the Random House Unabridged Dictionary, © Random House, Inc. 2006.

“without openings or breaks”¹, which applicant appears to be arguing fails to read on the wrenches of Battrick, Machovsky and Duke also does not apply to the applicant's disclosed invention because the applicant's drawings show the tool having a through hole (32) which may be considered to be a cavity or opening and the recesses on either end (22, 54, 60, 62, 84 and 86) may also be considered to be cavities or openings. Applicant also fails to provide the term “solid” with the specific definition that appears to be argues and also fails to disclose that the tool is solid, as argued, in the original disclosure. Thus, the wrenches of Battrick, Machovsky and Duke all read on the term “solid” in every way that the applicant's tool will.

C. Applicant also argues (starting on page 10, line 16 of the appeal brief) that the rejection of claims 19 and 20 depend from claim 11, which is previously argued as being non-obvious. In response, all arguments regarding claim 11 are previously addressed.

D. Applicant also argues (starting on page 10, line 20 of the appeal brief) that the rejections of claims 21 and 22 are improper, again arguing that the wrenches disclosed by Battrick, Machovsky and Duke are not solid and that the examiner uses hindsight reasoning to apply the references. In response, the pertinence of the term solid regarding the Battrick,

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Machovsky and Duke wrenches has been discussed supra and the examiner feels that proper motivation, which is provided by the references, has been cited to provide a case of *prima facie* obviousness that would not be considered to be hindsight reasoning to combine the references.


- a. The applicant also argues that claim 22 is improperly rejected because it is not obvious that the ends of the tool are different sizes. In response, the base Battick reference discloses that the opposite ends may be different sizes, as cited in the final rejection, and clearly shown in Figures 2A, 2B, 3A and 3B, and disclosed by Battick in col. 1, line 63-col. 2, line 19.

(11) Related Proceeding(s) Appendix


No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,


Bryan R. Muller

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